84-1077-13099

REPORT ON GEOLOGICAL MAPPING, GEOCHEMICAL AND VLF EM SURVEYS

on the

SERENITY GROUP

Atlin Mining Division

104 - N - 6E, 11E

59° 32' N 133° 05'W

for

David G. S. Purvis

by

U. Mowat, B. Sc.

Getty Mines Ltd.

November 17, 1984

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REPORT ON GEOLOGICAL MAPPING, GEOCHEMICAL AND GEOPHYSICAL SURVEYS ON THE SERENITY GROUP, ATLIN MINING DIVISION

INTRODUCTION

The Serenity Group, located some 32 kilometres due east of the town of Atlin, was staked over a period from September 22, 1983 to May 29, 1984 by J. E. Wallis, P. Eng. for David G. S. Purvis. Interest in the area which is bounded by McKinley and Bull Creeks was generated after the discovery of gold-bearing quartz stockworks in Cache Creek Group rocks and carbonatized ultramafics on the Standard Gold Shuksan property located some 22 kilometres to the northwest. A number of earlier and recent placer gold operations on Fox, Bull and McKinley Creeks, the similarity of the geology of the Serenity Group to that of the Shuksan property as well as the reported exposure of carbonatized quartz veins in bulldozed road cuts provided specific pathfinder targets for the staking of the Serenity Group claims.

Work to date on the Serenity Group has included a brief prospecting examination by J. E. Wallis, P. Eng. with the discovery of quartz stockworks assaying up to 1.0 g/t Au (0.030 oz/T Au) and 17.5 g/t Ag (0.51 oz/T Ag) as well as

a property examination by Getty Mines Ltd., Vancouver. The property examination included geologic mapping, soil, silt, and rock sampling, panning and a VLF EM survey. A quartz vein sampled during the Getty examination gave values of up to 6,000 ppb Au (0.175 oz/T Au).

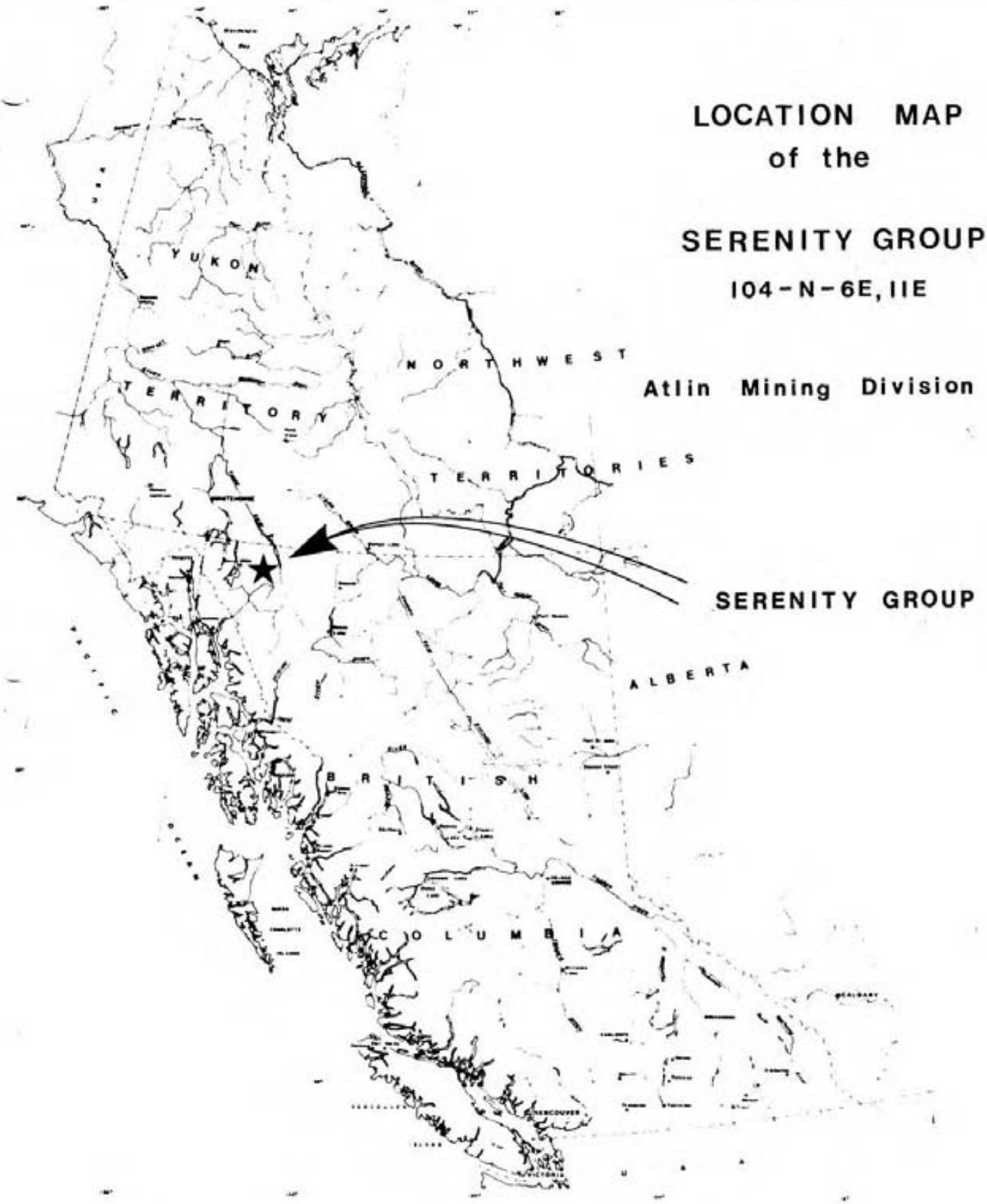
LOCATION AND ACCESS

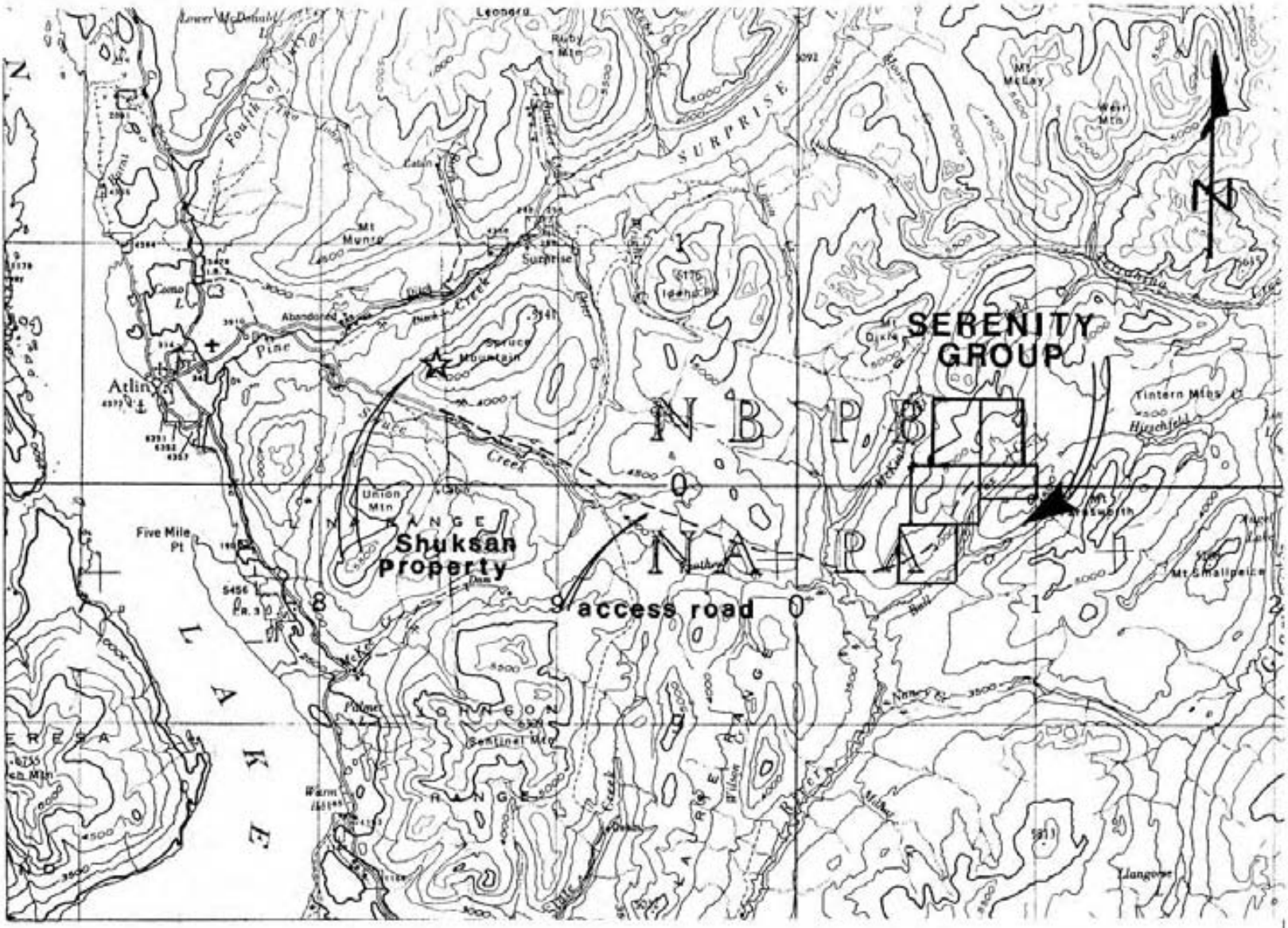
The Serenity Group of claims, located some 32 kilometres almost due east of the town of Atlin is bounded by McKinley Creek, Fox Creek and Bull Creek, all of which flow into the O'Donnel River. The claims are centered at latitude 59^{o} 32'N and longitude 133^{o} 05'W. The area covered by the claims is located on map sheets 104-N-6E and 104-N-11E.

Access to the Serenity Group is via a poorly maintained 4-wheel drive access road that follows Spruce Creek south-easterly for approximately 15 kilometres and then crosses McKinley Creek. As there is no bridge, the McKinley Creek must be forded at this point. The road then proceeds almost due east to the Serenity Group where is crosses most of the claims in the Serenity Group thus providing reasonably good access to the work areas.

HISTORY

Geologic and exploration activity in the vicinity of the


LOCATION MAP
of the
SERENITY GROUP
104-N-6E, 11E
Atlin Mining Division
SERENITY GROUP
YUKON
TERRITORY
NORTHWEST
TERRITORIES
ALBERTA
BRITISH
COLUMBIA



DETAILED LOCATION MAP OF THE
SERENITY GROUP, THE SHUKSAN PROPERTY
AND ROAD ACCESS

0 10

kilometres

Serenity Group has been restricted, until recently, to two placer gold operations which are located on both Fox and Bull Creeks. The placer operation on Bull Creek, is located on the southern boundary of the Tranquil claim and was last in operation from July 7 through August 25, 1983. The operation produced 24,680 grams (715.72 ounces) of placer gold from 57,692 cubic metres (75,000 cubic yards) of gravel. Nothing is known of the placer operation on Fox Creek which is located on the Calm claim, although evidence would indicate that it too was in operation in 1983. Elsewhere on the property are ancient-looking sluice boxes and wingdams which probably date back to the 1916's and the 1940's as the last recorded production for Bull and Fox Creeks is 1946.

Literature research tends to indicate that the general area of the Serenity Group has received very little mineral exploration as there are no known lode or base metal occurrences within the immediate vicinity of the claims.

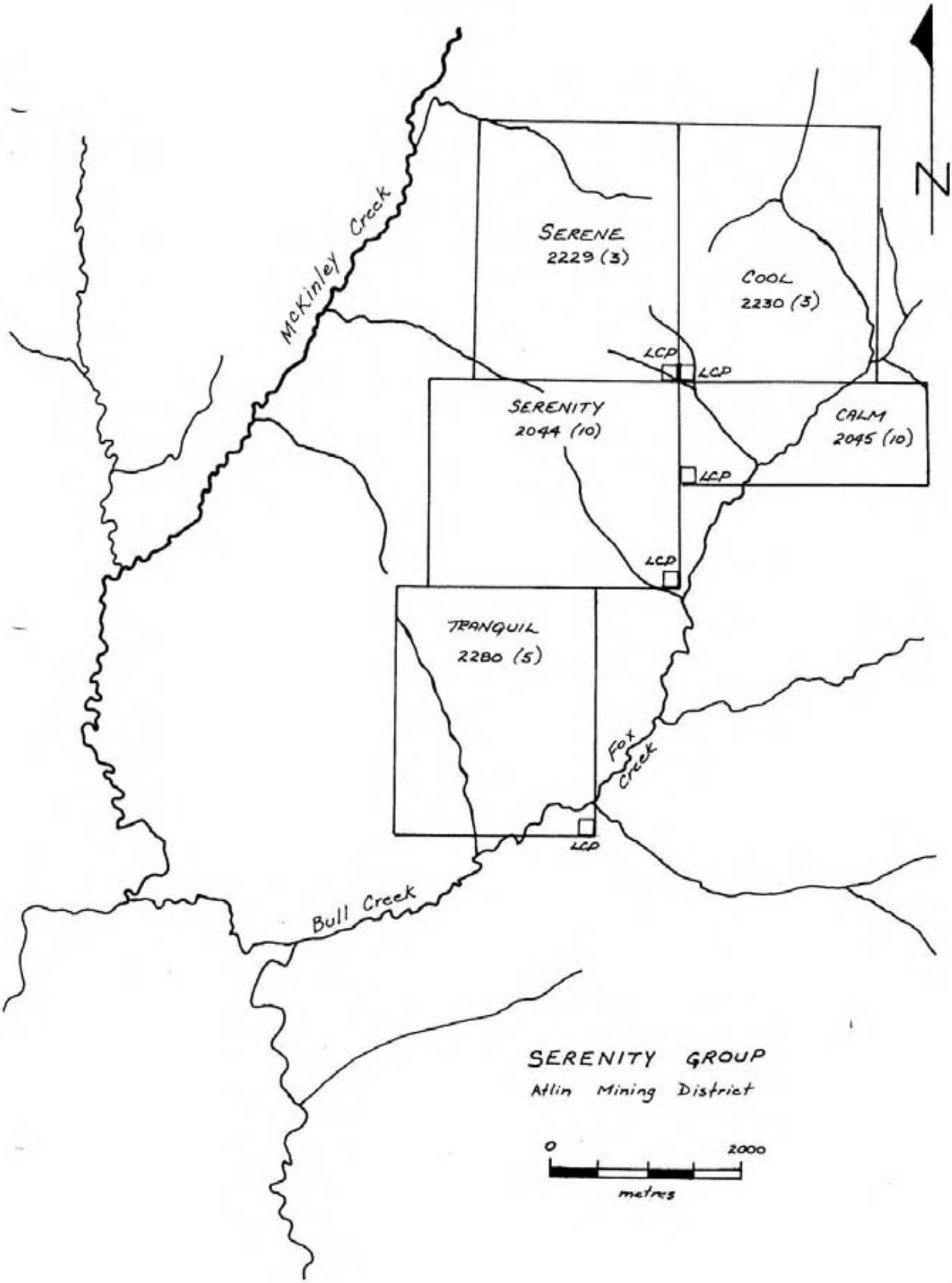
The Serene, Cool, Serenity, Calm and Tranquil claims were staked during a period covering September 22, 1983 to May 29, 1984 to cover the potential source of the placer gold on Fox and Bull Creeks. The claims were staked by J. E. Wallis, P. Eng. who acted as agent for David G. S. Purvis. Interest in this particular area was also

generated by the geologic similarities of the Serenity Group to those of the Shuksan property of Standard Gold Mines Ltd. which is located some 22 kilometres to the northwest and on which favourable gold values have been encountered in quartz stockworks in Cache Creek rocks and carbonatized ultramafics. Gold values of up to 328 grams/tonne (9.635 oz/T) have been obtained.

In the summer of 1984, Getty Mines Ltd. of Vancouver carried out a program of preliminary exploration on the Serenity Group with the consent of Mr. Purvis. The program consisted of geologic mapping, soil, silt and rock sampling, panning tests and a VLF EM survey.

CLAIM DATA

Claim Name	No. of Units	Tag No.	Record No.	Date Recorded
Serenity	20	69649	2044	Oct. 5, 1983
Calm	10	69650	2045	Oct. 5, 1983
Serene	20	77483	2229	Mar. 7, 1984
Cool	20	77484	2230	Mar. 7, 1984
Tranquil	20	69652	2280	May 31, 1984


N
McKinley Creek
SERENE
2229 (3)
COOL
2230 (3)
LCP
LCP
SERENITY
2044 (10)
CALM
2045 (10)
LCP
LCP
TRANQUIL
2280 (5)
Fox Creek
LCP
Bull Creek
SERENITY GROUP
Atlin Mining District
0
2000
metres

The total number of units in the Serenity Group number 90 and the claims cover an area of 2,250 hectares.

All claims were staked by J. E. Wallis, P. Eng. as agent for David G. S. Purvis. All claims were recorded in Atlin, B. C.

GENERAL GEOLOGY

The Serenity Group area, as mapped by J. D. Aitken (1951 - 1955) of the G. S. C., is underlain by Pennsylvanian and Permian Cache Creek Group rocks. The Cache Creek Group is divided into three parts:

Unit 6	Chert, argillite, chert-pebble conglomerate and chert breccia; derived quartzite and schist; minor 7 and 8
Unit 7	Greenstone and volcanic greywacke; derived amphibolite; minor 6 and 8
Unit 8	Limestone and limestone breccia

There are no known intrusives mapped in the immediate vicinity of the Serenity Group. However, 10 kilometres to the north of the claim group, lies the Surprise Lake batholith of Cretaceous age which is composed of alaskite and quartz monzonite. To the east, approximately 10 kilometres distant, there is a small plug of Tertiary olivine basalt and scoria.

PROPERTY GEOLOGY

The Serenity Group is underlain by the following rock types:

1) Greenstone of probable volcanic origin. This rock type is generally textureless, often carbonatized with minor very fine grained sulphides (possibly pyrite or arsenopyrite). Occasionally, this unit has minor angular, black to dark grey fragments of argillite.
2) Chert which is generally light grey, massive and textureless.
3) Chert pebble conglomerate which appears to have undergone some degree of silicification. This unit is light grey with rounded quartzose or silicified cobbles which reach up to 7 cm in diameter.
4) Banded chert of medium grey colour. The reason of the banding is not known by may represent bedding. This unit is ribboned with 2 mm quartz veinlets that cross cut the bedding and/or banding.
5) Argillite, which is generally dark grey to black. Occasionally, this unit is altered to a light grey colour by pervasive silicification. This unit displays several phases which include a graphitic phase, a phyllitic phase, a siliceous phase and a pyritic phase.
6) Quartzite which is black to dark grey and is argillaceous. Several rock surfaces have been noted that display somewhat crude ripple marks.
7) Limestone which is dark grey, occasionally heavily cut

by white calcite veinlets and stringers. This unit is occasionally heavily pyritized.

8) Coarse-grained, light coloured feldspar-quartz-hornblende porphyry intrusive has been noted in one location on the Tranquil claim and would appear to be a subcrop. The matrix to the feldspar, quartz and hornblende is very fine grained and light grey green in colour. The hornblende has been altered to chlorite and biotite.

Because of the general lack of outcrop on certain parts of the Serenity Group, the relationship of the above units is not well known. However, it would appear that the greenstone (unit 1) is stratigraphically or perhaps structurally the highest unit being underlain by a chert unit (unit 2) and by argillite (unit 5). The chert units 2, 3 and 4 may be part of the same chert horizon but in all cases chert overlies the argillite (unit 5). The limestone unit (7) is the lowest part of the stratigraphic sequence on the Serenity Group. The argillaceous quartzite (unit 6) would appear to be a restricted sedimentary phase of the argillite (unit 5).

The following is a detailed description of rocks noted in outcrop near soil sample stations or of rocks taken for analyses:

DETAILED SAMPLE DESCRIPTIONS

SAMPLE NUMBER	DESCRIPTION
4PU-0002S	Outcrop of black, siliceous argillite on road, subcrop; surfaces and fractured are rust stained; in the road to the upper placer operation, there are numerous boulders of light green, calcareous greenstone with black semi-replaced argillite fragments; some boulders may have a trace of possibly arsenopyrite; there is also some apparently barren but rusty quartz float and also a large boulder of gabbro with coarse grained feldspar and pyroxene
4PU-0004S	Subcrop of black argillaceous shale as described in 4PU-0002S; the shale is occasionally light grey and very siliceous with 1 mm cubes of pyrite
4PU-0005S	(4PU-0006R) Outcrop of black argillite with carbonate veinlets, non-siliceous with much iron oxide on fractures and a trace of sulphides in veinlets; the rock is very rusty
4PU-0009R	Outcrop of black argillite; highly fractured and rust stained; prominent jointing at N 70° E dipping 70-90° NW; occasionally very graphitic; pyrite casts up to 2 cm, average 5 mm
4PU-0010R	Quartz vein in black argillite with large angular vugs; very rusty
4PU-0011R	Dark Grey phyllitic argillite with up to 1 cm angular pyrite vugs occasionally filled with hematite
4PU-0015R	Subcrop of white quartz vein with vugs filled with quartz crystals; float contains rare angular pieces of chalcopyrite and magnetite; rusty on some fractures; the vein trends N 70° E; the host rock to the vein is black siliceous argillite or black quartzite

SAMPLE NUMBER	DESCRIPTION
4PU-0016R	Subcrop of black, siliceous argillite or black quartzite; rusty on fractures; no sulphides noted
4PU-0018R	Dark grey, graphitic, siliceous argillite with numerous pyrite casts that are occasionally filled with hematite; minor very fine grained pyrite in matrix; main jointing at N 20° E and vertical; secondary jointing at N 40° W, dipping 80° NW
4PU-0021S	Outcrop at this station is black to light grey phyllitic argillite
4PU-0022S	Outcrop at this station is dark grey, phyllitic, siliceous argillite with rust stained fractures and minor cubic pyrite casts; jointing is at N 75° E dipping vertically
4PU-0025R	Quartz float, vuggy; some iron staining; also possibly a subcrop of grey chert and dark grey to black argillite
4PU-0034S	Outcrop at this station is dark grey, phyllitic, siliceous argillite with 40% disseminated cubes of pyrite that are mostly oxidized to limonite; strong jointing at N 20° W; minor stringers of white carbonate; minor quartz float on road; pyrite crystals average 4 mm but are up to 1 cm and are all cubic in shape
4PU-0035R	Outcrop of dark grey, phyllitic, siliceous argillite with 60% disseminated pyrite cubes that average 4 mm but are up to 1 cm; minor quartz float
4PU-0036R	White to rusty quartz vein in dark grey phyllitic, siliceous argillite; vuggy with euhedral quartz crystals; trace of rusty pyrite
4PU-0037R	Same as 4PU-0036R
4PU-0040R	Quartz vein trending N 60° E, dipping

SAMPLE NUMBER	DESCRIPTION
4PU-0040R (continued)	vertically in dark grey, phyllite; quartz vein is very shattered and is 0.3 metres wide; much manganese stain; jointing in the host rock is at due north dipping vertically and also at N 70° E dipping vertically. Below this outcrop is a trench which contains dark grey, phyllitic argillite trending 250°/40° S which is cut by a 5 cm wide shear zone; also in the trench is a 0.3 m wide piece of white quartz vein which would appear to be part of the vein exposed on the road. This lower quartz vein also appears to trend N 70° E
4PU-0047S/48S	Between these two stations are several exposures of chert and argillite. The chert is light grey and shows evidence of quartzose or silicified, rounded cobbles. The chert overlays a dark grey phyllitic argillite and appears to strike due east and dip southwesterly at approximately 40°. Along the road is a second chert unit that strikes N 40° W and dips vertically and which consists of medium grey, banded chert. This unit appears to be folded. This chert unit is also ribboned with 2 mm quartz veinlets that cross cut the banding which appears to be bedding. The jointing throughout the exposures is at N 20° E dipping vertically and N 40° W, dipping vertically. The dark grey phyllitic argillite is somewhat interbedded with dark grey quartzite and has approximately 10% pyrite casts.
4PU-0053R	Outcrop of black, featureless limestone that is cut by numerous white, irregular calcite veinlets and stringers that are up to 7 cm wide but average 1 cm in width. Jointing is due north and dipping vertically.

MINERALIZATION AND ALTERATION

The main sulphide mineralization consists of pyrite which is dominantly in the shape of cubes and can reach up to 2 cm in diameter and form up to 60% of rock volume. Pyrite is almost entirely restricted to the argillite unit (#5). Rarely, pyrite occurs as very fine grained disseminations within the argillite. The size and amount of pyrite increases dramatically in the vicinity of the projected fault zone (indicated on the geologic map in pocket 1) where the cubes reach their maximum size of 2 cm and also form 40% to 60% of the outcrop.

The only other sulphides noted occurred in a quartz vein (sample 4PU-0015R). Here a 3 cm angular piece of chalcopyrite mixed with magnetite was noted in the quartz vein. It is interesting to note that a sample of the quartz vein returned 6,000 ppb Au (0.175 oz/T Au).

Alteration on the Serenity Group is generally confined to quartz veining although in certain areas pervasive silicification has been noted. It is believed that the areas of pervasive silicification may be related to unseen but projected breaks from air photo interpretation.

STRUCTURE

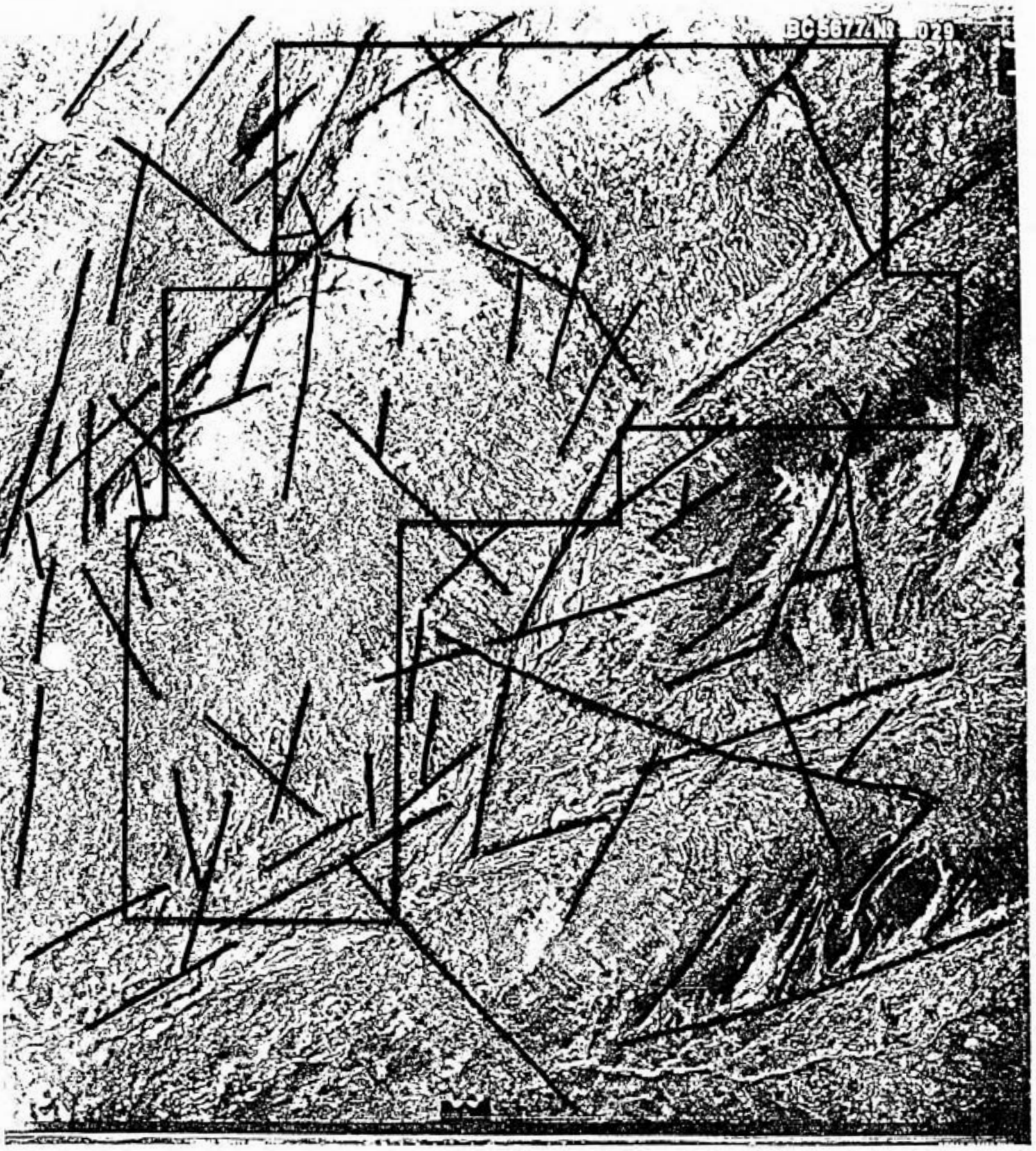
Most of the structure on the Serenity Group has been obtained from air photo interpretation. Only one major fault has been seen in the vicinity of the Serenity Group. Most lineaments as can be seen from the airphoto have an almost due northerly trend with a secondary trend at roughly 130°.

Jointing and consequently quartz veining as determined from the property examination of the Serenity Group shows a very strong preference for N 70° E. There is a lesser subsidiary jointing at due north to roughly N 10° E and N 10° W.

WORK PERFORMED

A) Mapping

Geologic mapping on the Serenity Group was performed by three Getty geologists during the period August 13 - 18, 1984. Mapping included examination of the road and trenches along the road, ridge traverses as well as several creek traverses. The mapping was done on a scale of 1:12,500. Stations were marked on the road for reference as well as soil sampling sites. The stations were put in at every 200 metres. During this time, roughly 14.0 linear kilometres were mapped. Soil and rock sampling were conducted during the mapping. Control for the mapping was done by hip chain and compass.



AIR PHOTO SHOWING THE MAJOR LINEAMENTS
AND THE OUTLINE OF THE SERENITY GROUP

B) Geochemical Sampling

Soil Sampling

A rough grid crossing the property was established by using the existing road. Stations were established every 200 metres and in almost every case, a soil sample was taken. When the soil development was non-existant because of glacio-fluvial gravels, only the station was marked in. All soil samples were collected from the "B" horizon at a depth of 0.3 to 0.35 metres. The "B" horizon is in general fairly well developed on the property. Soil samples were packed in kraft bags and shipped to Vancouver for analysis by Min-En Labs, North Vancouver. All soil samples were analysed for copper, lead, zinc, silver and arsenic by ICP technique. Analysis for gold was done by standard atomic absorption method. A total of 53 samples were collected.

Rock Sampling

A total of 36 rock samples were taken during the examination of the Serenity Group. Rock samples were shipped to Min-En Labs, North Vancouver and analysed for only gold by standard atomic absorption technique. Any rock or quartz vein that appeared as if it would be auriferous was collected for analysis.

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag,Al,As,B,Bi,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Mo,
Na,Ni,P,Pb,Sb,Sr,Th,U,V,Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sedimint samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formated by routing computer dotline print out.

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pretreated with HNO_3 and $HClO_4$ mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.005 ppm (5ppb).

Silt Sampling

Only one silt sample was collected during the property examination of the Serenity Group. The sample was sent to Min-En Labs, North Vancouver and analysed for copper, lead, zinc, silver and arsenic by ICP technique and for gold by standard atomic absorption method.

Panning

Ten panning tests were performed at various streams on the Serenity Group in order to test for visible gold. A heavy mineral pan with screen was used to test the gravels and silts at the creeks. Several pan tests were performed at the abandoned placer operations on Fox Creek and also at Bull Creek. Several pan tests at each selected site were done. Unfortunately, no visible gold could be seen.

C) VLF EM SURVEY

During August 19 - 24, 1984, a VLF EM survey was conducted on the Serenity Group. Two sets of grid lines were flagged in and stations marked in every 25 metres. The lines were marked in by hip chain and compass. A Geonics EM 16 was used to perform the survey.

One set of grid lines was marked in at an east-west direction in order to intersect a possibly fault zone

on which several large (up to 0.5 metre wide) angular blocks of quartz float were found. The lines on this set of east-west grid were numbered 20+00 N, 15+00 N, 10+00 N and 5+00 N. The station used for the VLF EM survey was Seattle, Washington (Station NLK) located at co-ordinates 121W55 - 48N12 with a frequency of 24.8. Readings on this grid were taken at 327°.

Grid lines trending northwest-southeast used Lualualei, Hawaii (Station NPM) located at co-ordinates 158W09 - 21N25 with a frequency of 23.4. These lines were numbered 5+00 SW, 0+00, 5+00NE, 15+00NE, 25+00 NE, 35+00 NE, 45+00 NE and 55+00 NE. Grid lines were marked in at this direction in order to cross cut the predominant angle of jointing and quartz veining (ie. N 70° E). Readings were taken at a bearing of 237°.

A total of 10.85 kilometres of VLF EM surveying was done. Lines were spaced at 500 metres apart on the east-west grid and from 500 to 1,000 metres on the northwest-southeast grid.

RESULTS AND CONCLUSIONS

Soil sampling on the Serenity Group has outlined areas of anomalous copper values that reach up to 354 ppm Cu. Areas of anomalous copper values (as determined by visual means) are generally associated with pervasive silicification and/or an increase in pyrite content. The pervasive silicification and increase in pyrite content, and perhaps consequently the anomalous copper values, are believed to reflect a structural break trending northeast-southwest and generally located along the hillside in the vicinity of the road. Occasionally, high arsenic and very rarely high silver values are associated with the high copper values.

Lead values are very low and display no patterns of geologic interest or any relationship to high gold values in soil.

Zinc values are also low and display no relationship to gold values in soil.

The VLF EM survey has outlined a conductive area which trends northeast-southwest on the Tranquil claim. It is believed that this zone reflects a fault zone. Copper values in the soil in the vicinity of this conductive zone are generally elevated. Two conductive zones have been indicated on the Calm claim. One of the conductive zones is probably related to a very rusty fault zone noted in the

abandoned placer operation pit on Fox Creek. The significance of the other conductive zone is not known although it may be caused by buried casing.

RECOMMENDATIONS

The Getty property examination of the Serenity Group, although somewhat precursory, has outlined several areas of interest which should be followed up with more detailed work.

Since chalcopyrite mineralization has been found in the quartz vein that returned the highest gold values (6,000 ppb in sample 4PU-0015R) and since the highest gold values in soil are associated with the more elevated copper values, it is recommended that a detailed grid be established over the area of the auriferous quartz vein to outline the length and direction since most of the vein is overburden covered. Detailed grids should also be established in other areas of anomalous copper values. Grid lines should be spaced 50 metres apart and soil samples sould be taken at close spacing over the auriferous quartz vein (approximately every 10 metres) and fairly close spacing in selected areas of elevated copper values (approximately every 25 metres).

Geophysical surveys at this point are not recommended as the auriferous quartz vein appears to be a low sulphide

system.

In addition, the Serenity Group should receive more thorough prospecting, particularly for areas of more intense quartz veining.

Should geochemical results in the selected areas return favourable results, trenching should be undertaken. Overburden should not create excessive problems as it is believed to be relatively shallow in the vicinity of the auriferous quartz vein and also in areas of anomalous copper values.

ITEMIZED COST STATEMENT

Salaries	
1 geologist at $210/day for 12 days	2,520.00
1 geologist at $166/day for 12 days	1,992.00
1 geologist at $92/day for 12 days	1,104.00
Truck Rental	
1 week at $294.00/week	294.00
5 days at $49.00/day	245.00
Equipment rental (jackall at $75.00 and canopy at $8.00/day)	144.00
Mileage at 1,390.61 km at $0.33/km	458.90
Gas	255.88
Airfare	
3 tickets from Vancouver-Whitehorse-Vancouver at $511.00/person	1,533.00
Helicopter	
TNTA: 2.0 hours at $485.00/hour	970.00
fuel 228.0 litres at $0.52 per litre	118.56
CAPITAL: 1.7 hours at $350.00/hour	595.00
fuel 42.5 gal at $2.65/ gallon	112.63
Accommodation	
Kirkwood Cottages, Atlin 3 persons at $65.00/day for 12 days plus 7% tax	834.60
Food	
Atlin Inn (meals for 3 people for 12 days)	434.91
Groceries	179.98
Materials and Supplies	573.00
Equipment Rental	
VLF EM Geonics 16 for 12 days at $20.00/day	240.00
Assays	
54 soil samples analysed for As, Cu, Pb, Zn, Ag by ICP at $10.60/ sample	571.90
36 rock geochem samples analysed for Au only at $7.75/sample	179.00

Assays (continued) 2 rock assays for gold and silver	28.50
Sample Shipments via CP Air	111.06
Air Cargo of Equipment	329.92
Airphotos 10 airphotos at $2.25/photo and 7% tax	24.08
Report Writing	750.00
Drafting	400.00
Airphoto Interpretation 2 days at $150.00/day	300.00
Reproduction Costs	40.02
TOTAL	$15,439.93

AUTHOR'S QUALIFICATIONS

I, Ursula G. Mowat, do hereby certify that:

1) I am a geology graduate of U. B. C. having graduated in 1969 with a B. Sc. in geology.

2) I have practiced my profession as a geologist for fifteen (15) years in all phases of geologic exploration (oil and gas, coal and minerals).

3) I have no interest or holdings, directly or indirectly in the Serenity Group of claims or in any securities evidencing an interest therein nor do I expect to.

DATED in Vancouver, B.C. this seventeenth (17) day of November, 1984.

Respectfully submitted,

Ursula G. Mowat

Ursula G. Mowat

Getty Mines Ltd.
509 - 700 West Pender Street
Vancouver, B. C.
V6C 1G8

STATEMENT OF QUALIFICATION

I, Brian K. Bowen, do hereby certify that:

1) I graduated from the University of British Columbia in 1970 as a Bachelor of Applied Science in Geological Engineering.

2) Since that time I have been employed as both a mine and exploration geologist in British Columbia and elsewhere.

3) I am presently employed by Getty Canadian Metals, Ltd., Vancouver, B. C.

4) I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

5) The work described in this report was done under my direct supervision.

DATED in Vancouver, B. C. this seventeenth (17) day of November, 1984.

B. K. Bowen

Brian K. Bowen, P. Eng.

Getty Canadian Metals, Ltd.
509 - 700 West Pender Street
Vancouver, B. C.
V6C 1G8

McKinley Creek

Serene

Cool

Serenity

Calm

Fox Creek

Tranquil

Bull Creek

GEOLOGY AND LOCATION MAP OF SOIL, ROCK, SILT SAMPLES AND EM LINES

LEGEND

Outcrop : c chert, q quartzite, a argillite, p phyllite, c a interbedded (?) chert and argillite

Outcrop : volcanic greenstone, intrusive, limestone

Quartz Float and Outcrop : minor, moderate, strong

Fault Zone

Rock Sample

Soil Sample

Silt Sample

Pan Test For Visible Gold

Legal Corner Post

Road

Trench

EM line with conductors marked in

0 1000

metres

McKinley Creek

Serene

Cool

Serenity

Calm

Fox Creek

Tranquil

Bull Creek

N

LOCATION MAP AND RESULTS OF ROCK, SOIL, SILT SAMPLING

LEGEND

- Soil Sample
- Rock Sample
- Silt Sample

13,099

Au ppb	Ag ppm	As ppm
Cu ppm	Pb ppm	Zn ppm

- Road
- Trench
- Legal Corner Post

0 1000
metres

Appendix I

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO : PURVIS, DAVID G.S.

1390 20TH ST.
WEST VANCOUVER, B.C.
V7V 3Z8

** CERT. # : A8412189-001-A
INVOICE # : I8412189
DATE : 8-JUN-84
P.O. # : NONE

Sample description	Prep code	Ag FA oz/T	Au FA oz/T				
SG-1	207	0.51	0.030	--	--	--	--
SG-2	207	0.08	0.005	--	--	--	--

B. Hwaite

Registered Assayer, Province of British Columbia

PROJECT No: 2074 [illegible] NORTH VANCOUVER, B.C. V7M 1C2 FILE No: 7-193 P.12

ATTENTION: B.K. BOWEN (604)929-5216 OR (604)988-4524 •TYPE SOIL RESCHEM• DATE: SEPTEMBER 7, 1954

REPORT VALUES IN PPM	AG	AS	CU	PB	ZN	AU-FPB
4PU00015	.2	35	42	7	72	5
4PU00020	.2	60	107	10	122	10
4PU00040	.2	25	87	7	72	5
4PU00050	.1	23	87	4	82	20
4PU00075	.6	31	47	8	93	10
4PU00085	.5	25	89	4	90	5
4PU00105	.1	58	354	12	188	10
4PU00135	.1	24	35	5	37	5
4PU00145	.1	24	71	1	66	25
4PU00175	.2	32	56	10	61	10
4PU00195	.0	20	69	1	55	5
4PU00205	.2	26	48	4	66	10
4PU00215	.1	41	78	10	78	20
4PU00225	.2	32	52	7	82	5
4PU00235	.0	31	71	5	96	20
4PU00245	.2	41	52	10	76	90
4PU00265	.1	37	87	8	88	5
4PU00275	.2	32	43	4	66	10
4PU00285	.3	26	36	4	62	5
4PU00295	.0	31	41	4	87	20
4PU00305	.1	28	41	7	58	5
4PU00315	.2	37	44	3	76	10
4PU00325	.4	35	61	12	78	10
4PU00335	.4	50	72	10	82	75
4PU00345	.2	100	101	14	108	15
4PU00355	.6	56	136	17	117	10
4PU00375	.4	34	62	5	75	10
4PU00415	.4	44	71	8	76	10
4PU00425	.3	37	78	7	71	10
4PU00435	.0	22	35	4	59	5
4PU00445	.8	23	23	5	102	5
4PU00455	.4	20	76	7	51	5
4PU00465	.3	15	49	7	59	10
4PU00475	.8	42	192	19	128	10
4PU00485	.5	3	40	4	290	10
4PU00495	.8	24	54	14	69	5
4PU00505	.5	12	22	7	29	10
4PU00515	.7	21	32	11	37	5
4PU00525	.0	12	49	10	54	45
4PU00545	.4	24	137	3	197	5
4PU00555	.1	7	26	4	35	10
4PU00565	.3	26	52	6	52	5
4PB01515	.2	15	39	8	45	10
4PB01525	.0	24	13	9	29	5
4PB01555	.3	15	47	8	89	5
4PB01565	.4	3	27	6	101	5
4PB01575	.1	12	25	4	67	5
4PB01585	.1	12	24	7	41	10
4PB01595	.3	20	34	5	53	5
4PB01605	.0	10	18	10	39	5
4PB01615	.4	25	27	7	56	10
4PB01625	.0	13	19	2	41	5
4PB01635	.1	9	20	7	33	10
4PB01645	.3	17	45	3	47	5

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524 TELEX: 04-352828

GEOCHEMICAL ANALYSIS CERTIFICATE

COMPANY: GETTY MINES LTD.
PROJECT: 2036
ATTENTION: B.K. BOWEN

FILE: 4-899/P1
DATE: SEPT.5/84
TYPE: ROCK GEOCHEM

We hereby certify that the following are the results of the geochemical analysis made on 30 samples submitted.

SAMPLE NUMBER	Au PPB
4PT-0003R	<5
0006R	10
0009R	15
0010R	5
0011R	5
0015R	6000
0016R	40
0018R	45
0025R	130
0035R	35
0036R	10
0037R	30
0040R	10
0053R	45
0061R	5
4PB-0062R	5
4PB-150R	15
153R	10
154R	25
4PB-165R	5
4PT-0221R	15
0222R	40
0223R	5
0224R	15
0225R	20
0226R	40
0227R	5
0228R	5
0229R	10
4PT-0230R	5

Certified by _____

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524 TELEX: 04-352928

GEOCHEMICAL ANALYSIS CERTIFICATE

COMPANY: GETTY MINES LTD.
PROJECT: 2036
ATTENTION: B.K. BOWEN

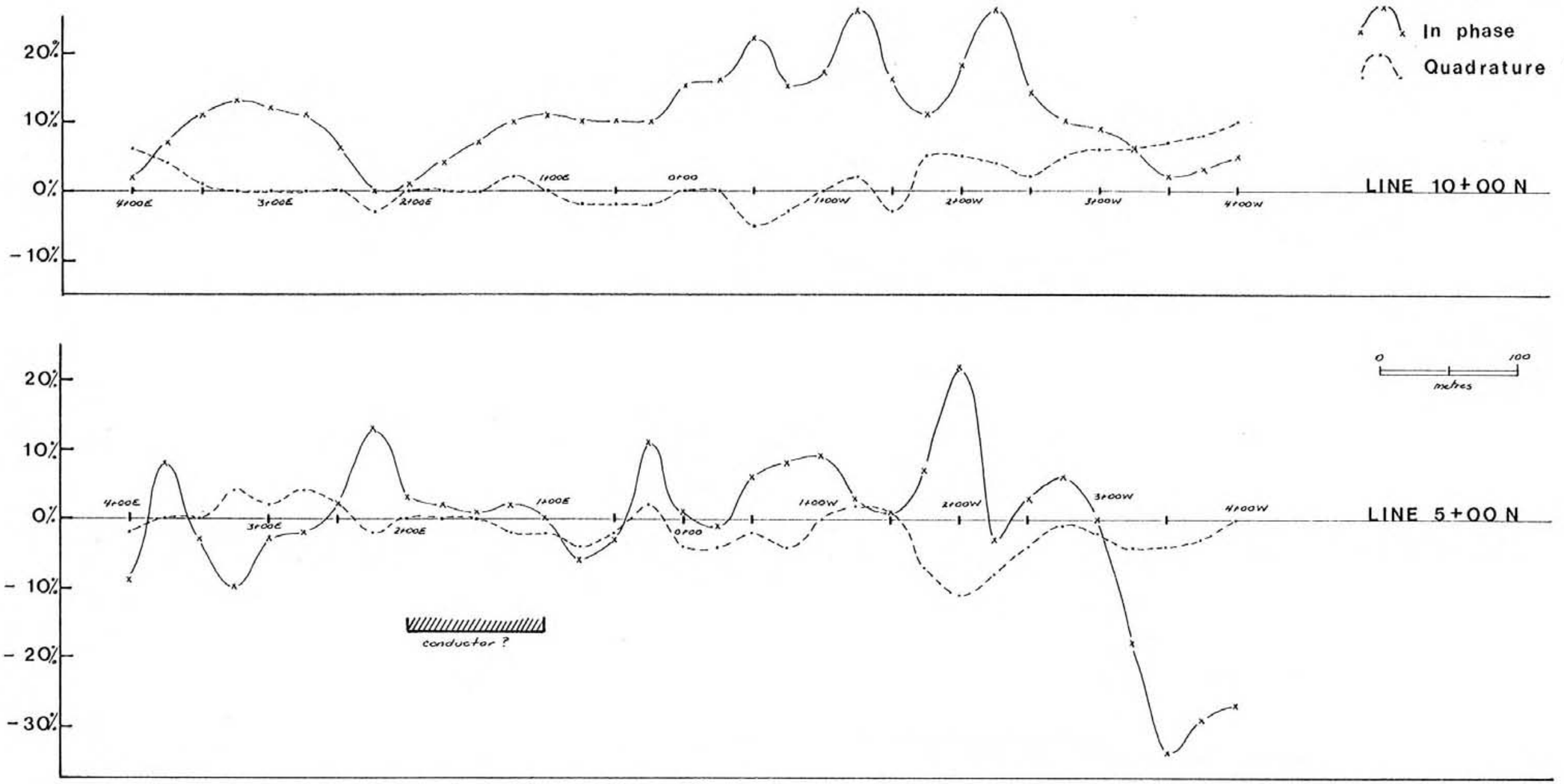
FILE: 4-899/P2
DATE: AUGUST 31/84
TYPE: ROCK GEOCHEM

We hereby certify that the following are the results of the geochemical analysis made on 6 samples submitted.

SAMPLE NUMBER	AU PPB
4PT 0231R	10
32R	5
33R	10
34R	20
4PT 0235R	20
4PB 166R	5

Certified by

EM PROFILES



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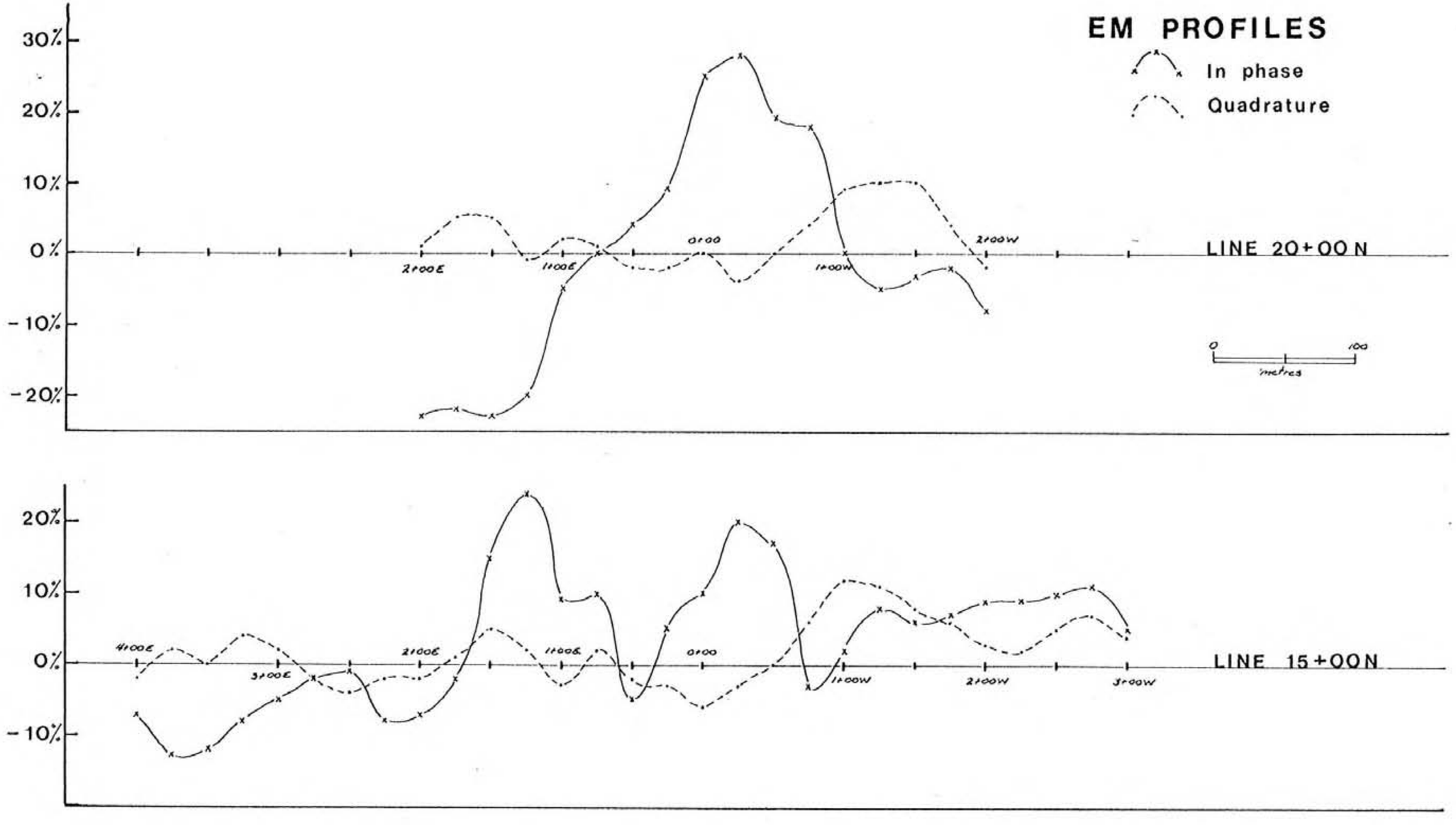
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In phase
Quadrature
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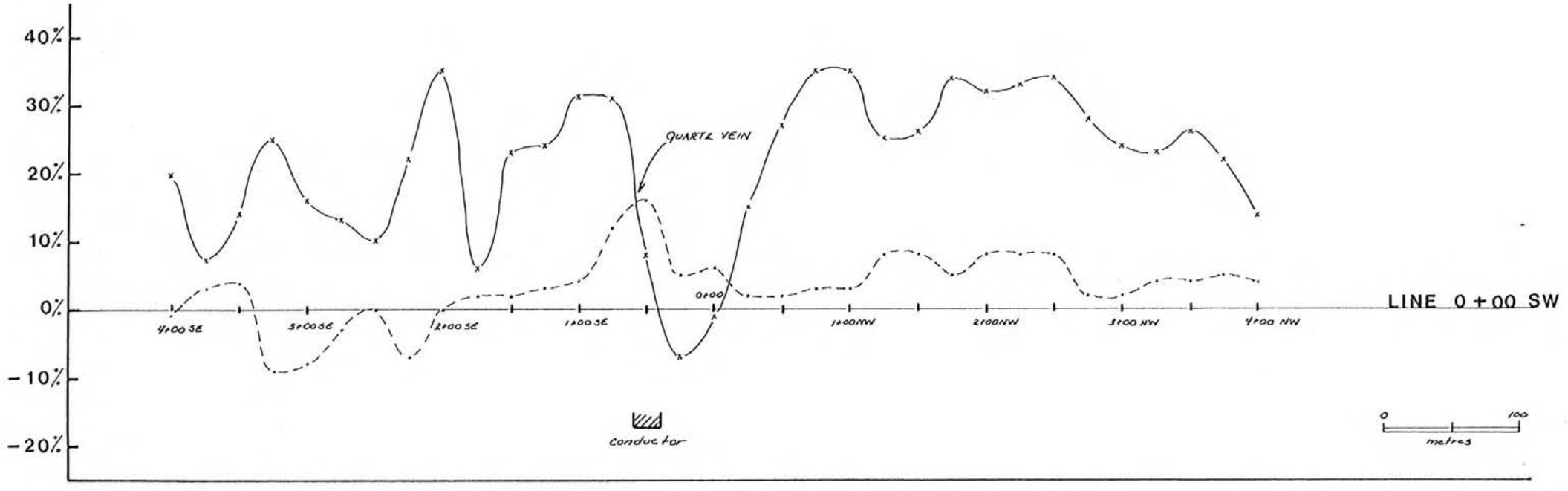
20%
10%
0%
-10%
-20%
2100E
1100E
0+00
1+00W
2100W
LINE 20+00N
0
100
metres
20%
10%
0%
-10%
4100E
3100E
2100E
1100E
0+00
1+00W
2100W
3+00W
LINE 15+00N

13099

EM PROFILES

In phase

Quadrature



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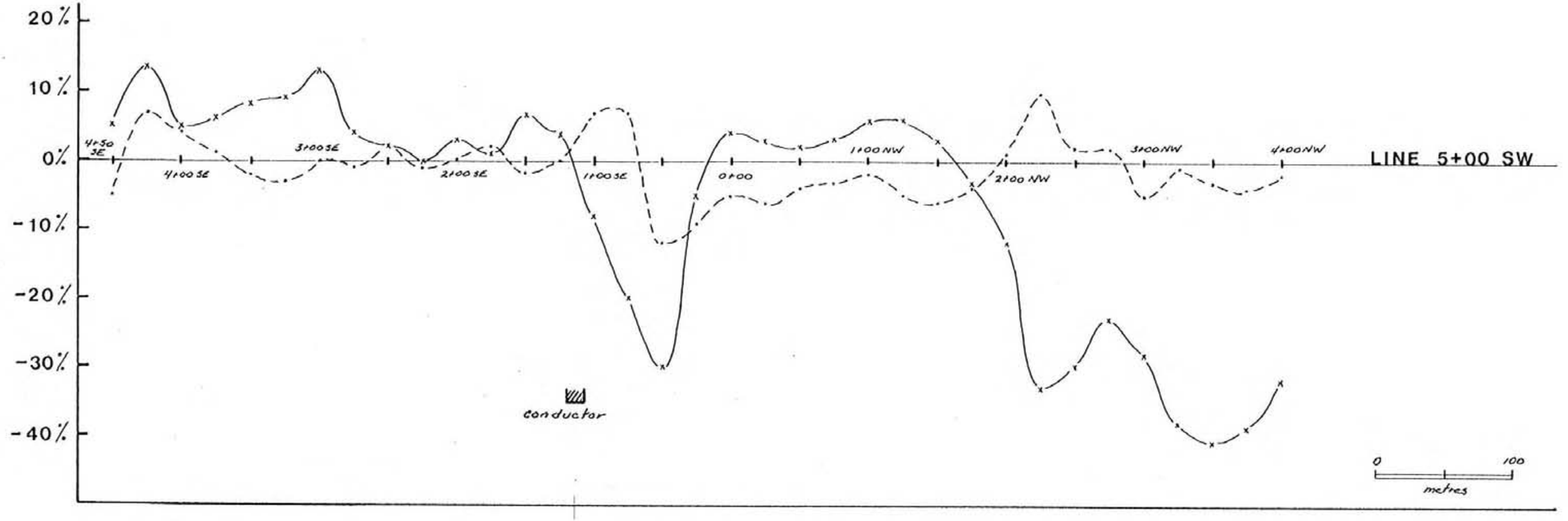
EM PROFILES

In phase

Quadrature



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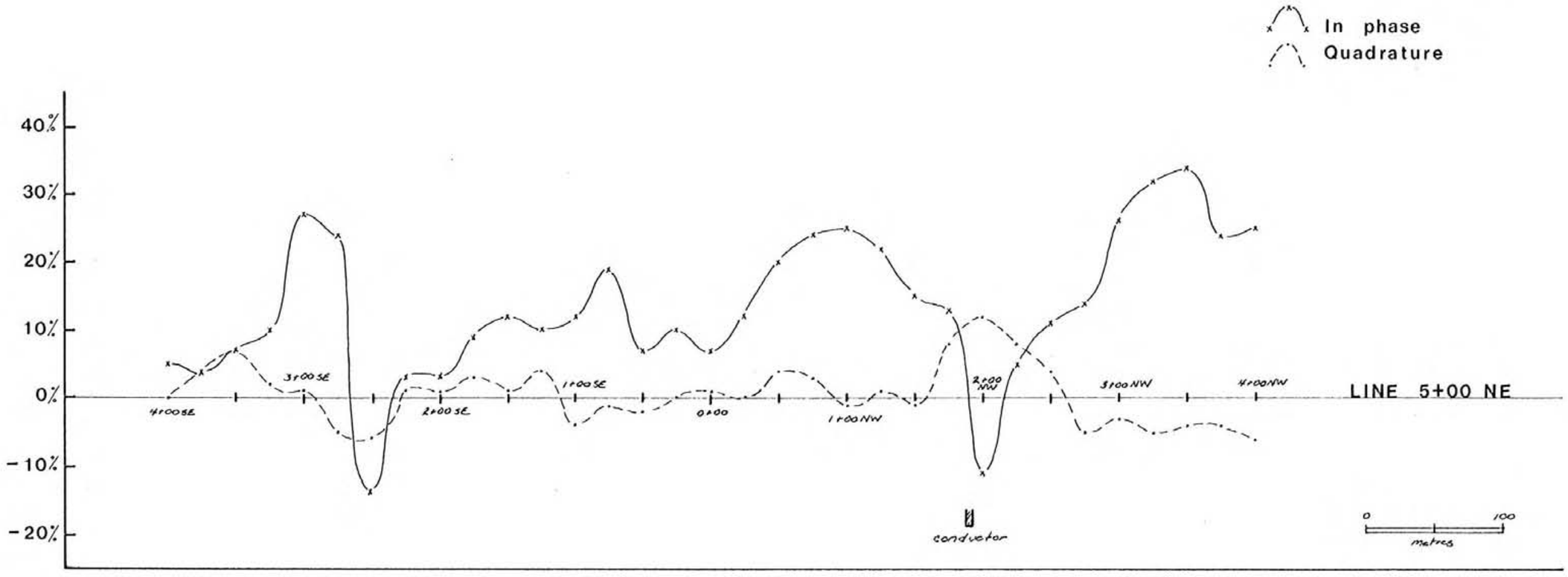

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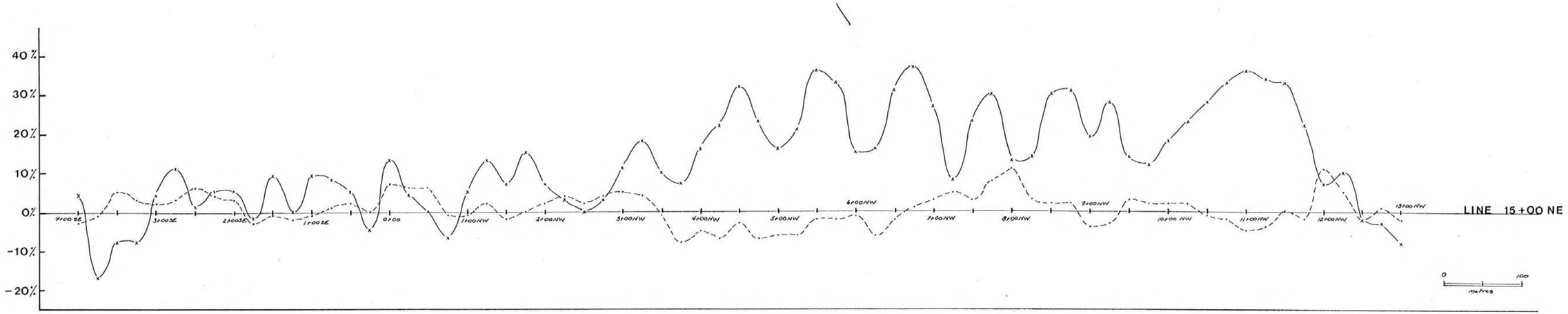
EM PROFILES

In phase

Quadrature



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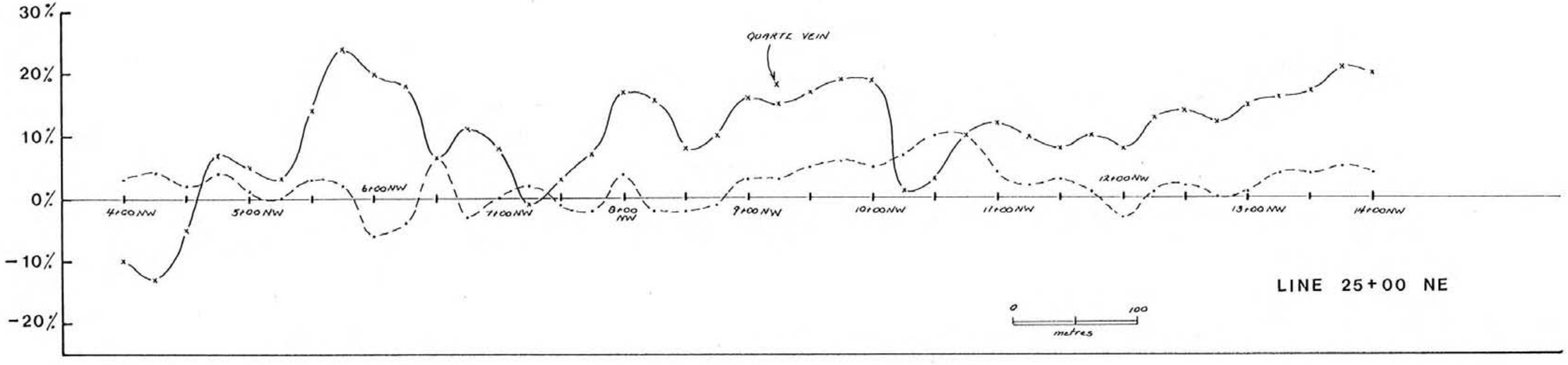
EM PROFILES

In phase

Quadrature



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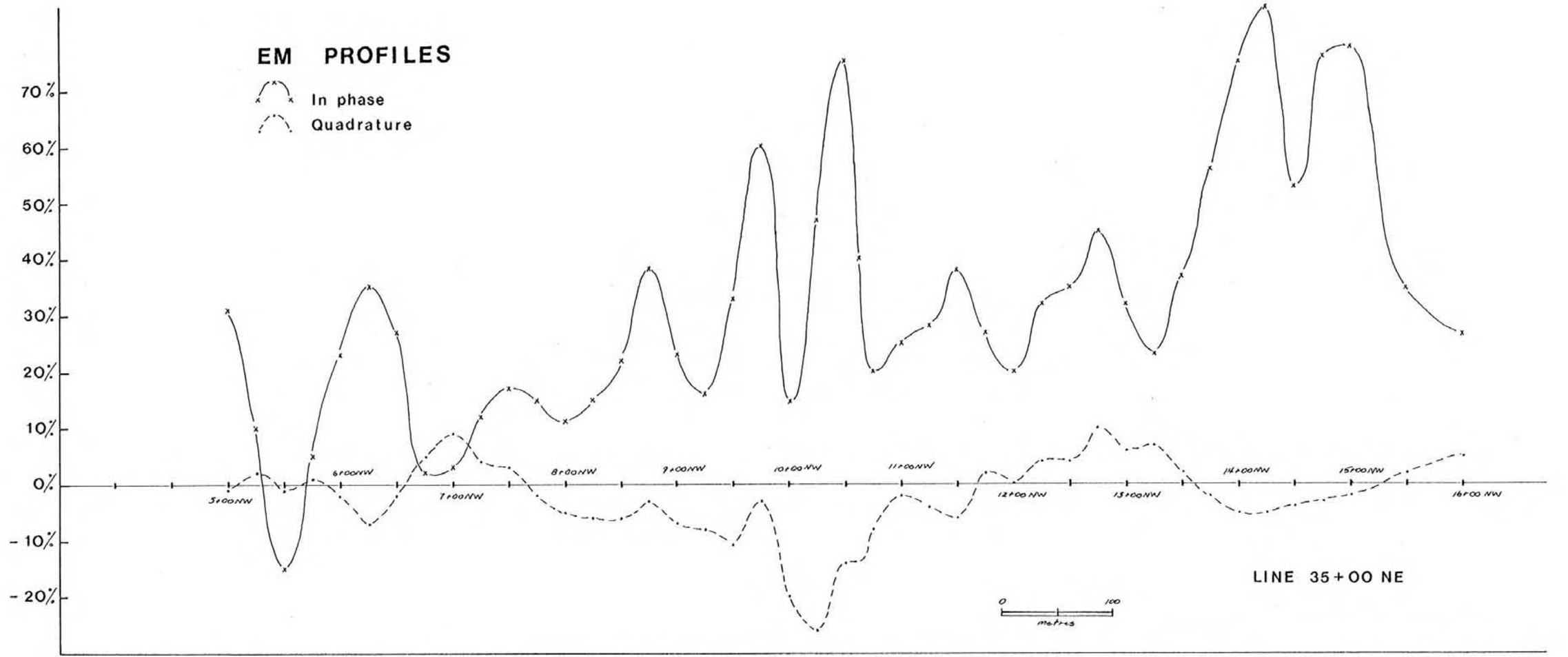
EM PROFILES
In phase
Quadrature
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
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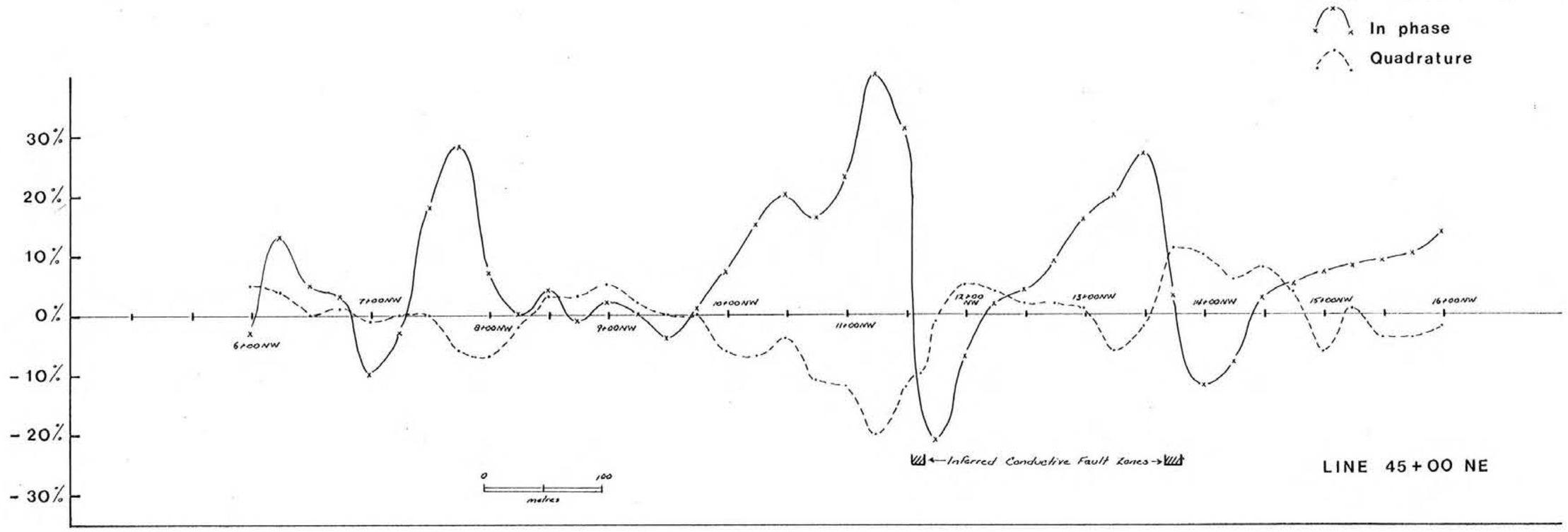
6+00NW
7+00NW
8+00NW
9+00NW
10+00NW
11+00NW
12+00NW
13+00NW
14+00NW
15+00NW
16+00 NW
0
100
metres
LINE 35+00 NE

13099

EM PROFILES



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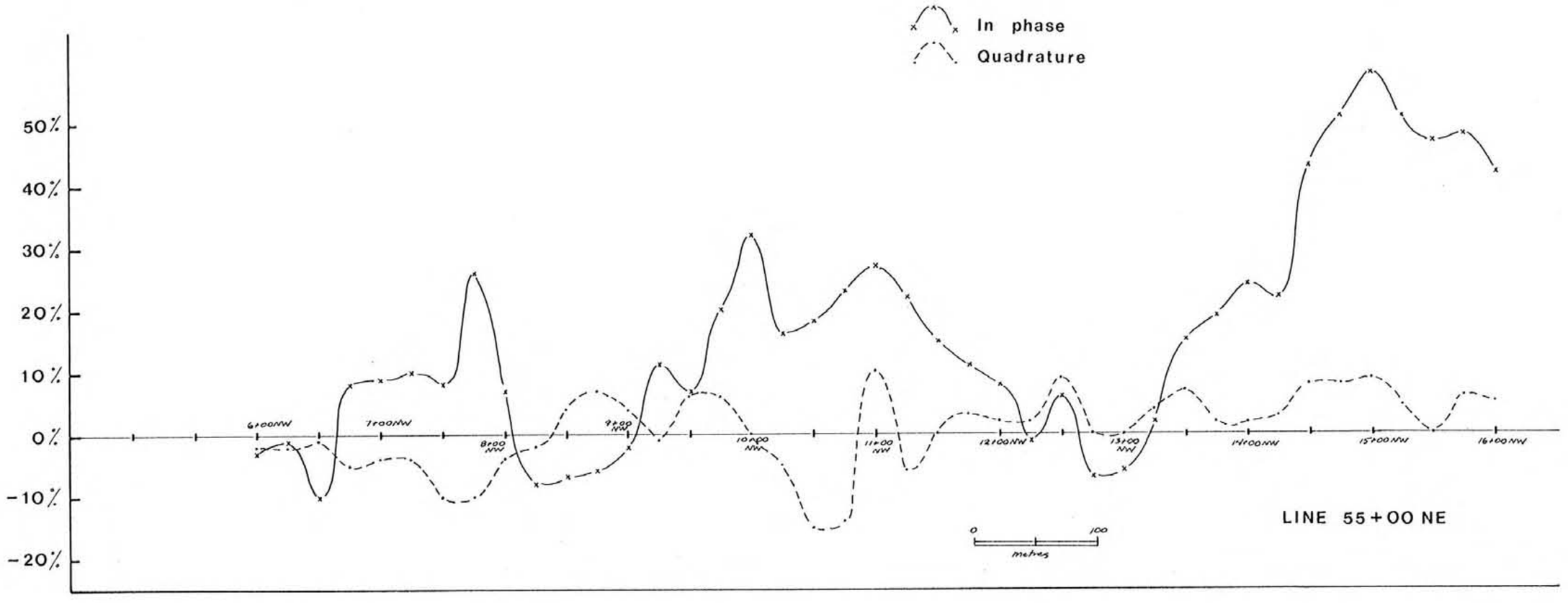

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